

Application No. 09/685,412
Reply to Office Action of April 2, 2004

Atty. Docket No. 202709US-6541-6541-6

REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1, 3-6, 8, and 10-13 are currently pending in the present application; Claims 1, 6, 8, 11 and 14 are amended by way the present amendment. Claims 1, 6-8 and 14 are amended to correct cosmetic matters of form. Claim 8 has been amended to clarify that it is not intended to invoke 35 U.S.C. § 112, 6th paragraph. New Claim 15 is added to recite the means-plus-function limitation "frequency measurement means." Thus, no new matter is presented.

In the outstanding Office Action Claims 7 and 14 were objected to as being substantial duplicates of Claims 6 and 13 respectively; Claim 11 was object to as depending from canceled Claim 9; Claims 1 and 8 were rejected under 35 U.S.C. § 103(a) as being anticipated by Durboraw, III (U.S. Patent 6,178,195, hereinafter Durboraw); Claims 5-7 and 12-14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Durboraw in view of Krasner (U.S. Patent No. 6,064,336, hereinafter Krasner); and Claims 3-4 and 10 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form.

Applicants acknowledge with appreciation the indication of allowable subject matter. However, since Applicants consider that independent Claims 1 and 8 patentably define over the prior art, the remaining independent claims have presently been maintained in their dependent form.

Claims 7 and 14 were objected to as being substantial duplicates of Claims 6 and 13 respectively. In response, Claims 7 and 14 have been amended to change their dependencies, thus Applicants respectfully request that this objection be withdrawn.

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Claim 11 was objected to as depending from canceled Claim 9. In response, Claim 11 was amended to depend from Claim 8, instead of Claim 9. Therefore, the objection to Claim 11 is now believed to be overcome.

With respect to the rejections under 35 U.S.C. § 103, Applicants respectfully submit that amended Claims 1 and 8 state novel features not clearly taught or rendered obvious by the prior art of record.

The present application relates to GPS positioning method and a GPS reception apparatus. In an exemplary embodiment, the apparatus receives frequency information from a standard wave to acquire a GPS signal from a satellite. The method also includes using the information from the standard wave in place of information received from the satellite to perform a positioning arithmetic operation.

Claim 1 recites, *inter alia*, a GPS positioning method, comprising:

“...acquiring high precision frequency information provided by a standard wave;

measuring an oscillation frequency of a reference oscillator used in a GPS receiver section or a frequency variation of the oscillation frequency using the received high-precision frequency information...

performing a positioning arithmetic operation using the high precision time information in place of time information sent from said GPS satellite.”

Durboraw relates a method for detecting spread spectrum signals (i.e., GPS signals) using a signal from a secondary source (i.e. Iridium satellite system).¹ Durboraw describes that the spread spectrum receiver uses the timing reference and the frequency reference observed by the secondary-system receiver to detect the spread spectrum signal.² Durboraw further states that the frequency reference is determined or established from the secondary-

¹ Durboraw at column 3, lines 7-15.

² Durboraw at column 5, lines 62-65.

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source signal.³ At no point does Durboraw teach or suggest using a signal other than the signal received from the GPS satellite to perform any positioning arithmetic operation.

Claim 1 recites "acquiring high precision time information" from a standard wave and using that timing information to perform a "positioning arithmetic operation using the high precision time information *in place of* time information sent from said GPS satellite."

(emphasis added) In contrast, as asserted in the Official Action, Durboraw describes performing a positioning arithmetic operation as normally performed in a GPS receiver after a synchronization step. However, Claims 1 and 8 recite that a positioning arithmetic operation is performed using the high precision time information *in place of* time information sent from a GPS satellite. Therefore, the recitations of Claim 1 differs significantly from Durboraw which describes performing positioning arithmetic operations after acquiring the GPS signal "as normally does a GPS receiver after synchronization step." In this regard, "all words in a claim must be considered in judging the patentability of that claim against the prior art," In re Wilson, 165 U.S.P.R. 494,496 (CCPA 1970).

Accordingly, Durboraw fails to teach or suggest the use of the high precision time information *in place of* time information sent from said GPS satellite to perform positioning arithmetic operations as recited in Claim 1.

Further, Claim 1 recites "measuring an oscillation frequency of a reference oscillator used in a GPS receiver section or a frequency variation of the oscillation frequency using the received high-precision frequency information." Conversely, Durboraw describes using the frequency information to generate a highly-precise synthesized reference signal which is used for GPS signal detection. The Official Action states that "it would have been obvious to one of ordinary skill in the art at the time the invention was made that the step, as taught by

³ Durboraw at column 6, lines 25-26.

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Durboraw would impliedly include measuring the frequency variation of local oscillation frequency using the acquired precision frequency reference and use the result to generate a highly-precise synthesized reference signal which is used for GPS signal detection.”⁴ However, Durboraw does not describe that the variation of the reference oscillator is measured or that variation in the reference oscillator is detected, based on the received frequency information.⁵ Instead, Durboraw describes that the highly-precise reference signal is generated by using only the frequency reference acquired from a secondary source, and includes no discussion regarding the reference oscillator whatsoever. Therefore, Durboraw fails to teach or suggest measuring an oscillation frequency of a reference oscillator or a frequency variation of the oscillation frequency using the received high-precision frequency information, as recited in Claims 1 and 8.

The Examiner may assert inherency of facts outside of the record which are capable of instant and unquestionable demonstration as being “well-known” in the art. In re Ahlert, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970). As set forth in M.P.E.P. § 2144.03, if an applicant traverses an assertion made by an Examiner while asserting such inherency, the Examiner should cite a reference in support of their assertion.

In addition, Applicants respectfully traverse those grounds for rejection relying on the assertion of inherency based on a single reference. Applicants do not consider the features to be of such notorious character that an assertion of inherency can be inferred. Therefore, Applicants traverse this assertion. “The examiner should cite a reference in support of his or her position.”⁶

⁴ See paragraph bridging pages 4-5 of the April 2, 2004 Official Action.

⁵ Durboraw at column 6, lines 35-42.

⁶ MPEP 2144.03, page 2100-129, left column, second full paragraph of MPEP 2144.03.

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Accordingly, Applicants respectfully request that the rejection of Claim 1 under 35 U.S.C. § 103(a) be withdrawn. For substantially the same reasons given with respect to Claim 1, it is submitted that Claim 8 also patentably defines over Durboraw.

As discussed above, Durboraw fails to teach or suggest "measuring an oscillation frequency of a reference oscillator used in a GPS receiver section or a frequency variation of the oscillation frequency using the received high-precision frequency information" or "performing a positioning arithmetic operation using the high precision time information in place of time information sent from said GPS satellite" as recited in Claim 1. Likewise Krasner fails cure this deficiency, and therefore, none of the cited references, either alone or in combination, can properly be asserted as suggesting or disclosing Applicant's Claims 5-7 and 12-14 which include the above-distinguished recitations by virtue of dependency. Therefore, the Official Action does not provide a *prima facie* case of obviousness with regard to any of these claims.

Accordingly, Applicant respectfully requests that the rejection of Claims 5-7 and 12-14 under 35 U.S.C. § 103(a) be withdrawn.

NEW CLAIMS

New Claim 15 recites substantially similar limitations to those discussed above and is provided for presenting aspects of the invention in means-plus-function format (35 U.S.C. § 112, 6th paragraph). Accordingly, Applicants submit that new Claim 15 is likewise allowable.

CONCLUSION

As Applicants have not substantively amended the claims in response to any rejection of record, should a further rejection be applied in the next Action based upon newly cited

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prior art, Applicants submit that such an action cannot properly be considered a Final Office Action.

Consequently, in view of the present amendment and in light of the foregoing comments, it is respectfully submitted that the invention defined by Claims 3-8 and 10-15 are patentably distinguishing over the prior art. The present application is therefore believed to be in condition for formal allowance and an early and favorable reconsideration of the application is therefore requested.

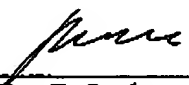
Respectfully submitted,

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